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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/133,960	Applicant(s) JOSHI ET AL.	
	Examiner Hai Tran	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/28/2005 has been entered.

Response to Arguments

Applicant's arguments with respect to claim 1-5, 8-11 and 32-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3-5, 8-11, and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot et al. (US 6026086)

Regarding claim 1, Krisbergh shows a wireless information signal transfer (Col. 3, lines 17-27) and interactive television system (Col. 1, lines 60-Col. 2, lines 35) comprises:

At least a first communication unit (Fig. 1, Set Top Converter 54) operatively coupled to a television set (Fig. 1, element 56), for generating at least one information signal ("the command input into the Set Top Converter 54 by the inputting device 58 wherein the Set Top Converter 54 generates a display signal "text/command signal" for display on the television set 56 such as on-line Chat sessions, URL for browsing through the information source... see Fig. 6, Col. 4, lines 51-65 and then the text/command signal is transmitted by an upstream transmitter 106 on an RF-modulated upstream channel 22 ...", Col. 4, lines 48-55) and for generating at least one display signal for display on the television set (by receiving a television program along with sequential portions of the "received information" inserted in the VBI at the Set Top Converter 54, the Set Top Converter 54 generates a television program display or extracts a "received information" from VBI, and then the Set Top Converter 54 displays the received TV programming or the received information on the television 56 respectively, see Col. 4, lines 36-65).

A wireless signal transfer network (Fig. 1, network 12; Col. 3, lines 17-27), operatively coupled to the at least a first communication unit (Set Top Converter 54), for wirelessly transferring signals including the at least one information signal;

At least a second communication unit (Fig. 1, element 36), operatively coupled to the wireless transfer network 12, for receiving the at least one information

signal (Cable HeadEnd 36 receives the inputted "command" on the upstream channel of the distribution network 12; Col. 4, lines 48-60);

A server (Fig.1, element 38), operatively coupled to the at least a second communication unit (Cable HeadEnd 36), for processing the at least one information signal (a 'command') and providing data included in the information signal to a functional network 60 (the HeadEnd Server 38 receives the forwarding "command" from the Cable HeadEnd Equipment 36, then the HeadEnd Server 38 transmits a 'command' based on the forward command to the information source 60; Col. 4, lines 48-60), wherein the server retrieves return data from the functional network (reads on Krisbergh 's information source 60 (functional network) transmits the 'information' to the HeadEnd Server 38 (server) in which the HeadEnd Server 38 receives/retrieves/processes the 'information', see Col. 6, lines 49-53 and Col. 9, lines 8-10) and provides the return data to the at least a 2nd communication unit 36 (reads on the HeadEnd Server 38 receives/retrieves/processes the 'information' and then forwards/provides the 'information' (return data) to the VBI inserter 90 of the Cable HeadEnd Equipment 36 (a 2nd communication unit), see Col. 6, lines 47-52; Col. 7, lines 32-35), the at least a 2nd communication unit 36 generating at least one return information signal (return data, downstream channel 20) and providing the at least one return information signal to the wireless network 12 (wireless network; Col. 7, lines 35-57), the wireless signal transfer network wirelessly transferring the at least one return information signal (return data) to the at least a 1st communication unit 54 , which generates the at least one display signal for display on the TV set 56

(Col. 6, lines 47-Col. 7, lines 20 and Col. 8, lines 18-60), wherein the at least one information signal ("command") is independently transmitted from a TV signal (could be read on either the 'command' is from the upstream channel and is independently/separate from the downstream channel or the Cable HeadEnd Equipment 36 (a TV signal) and the HeadEnd server 38 independently transmits the received 'command' (information signal) from the set top converter 54 to the ISP 60, see Col. 5, lines 25-Col. 6, lines 21).

Krisbergh does not disclose the at least one return information is independently transmitted from a TV signal; However, Krisbergh discloses the at least one return information is dependently transmitted from a TV signal (return data is within the VBI of the TV signal).

Lancelot, in a similar art, discloses the return data is independently transmitted from a TV signal (Fig. 2; Col. 4, lines 25-Col. 5, lines 17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh with Lancelot so to provide a unified circuit switched and packet-based communications system architecture with network interworking functionality. Moreover, to increase the amount of data that can be transmitted downstream.

Regarding claim 3, Krisbergh further discloses remote data entry and control means (Fig. 1, element 58), wirelessly (IR transmission) coupled to the at least at first communication unit 54, for permitting a system user to control display of display

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signals on the television set 56 and enter data corresponding to the display of the display signal (Col. 4, lines 45-56 and Col. 8, lines 42-65).

Regarding claim 4, Krisbergh further discloses wherein the remote data entry and control means (Fig. 1, element 58) comprises an alphanumeric keyboard portion.

Regarding claim 5, Krisbergh further discloses wherein the alphanumeric keyboard portion (Fig. 1, element 58) is in infrared communication (Col. 8, lines 42-45) with the at least a first communication unit 54.

Regarding claim 8, Krisbergh further discloses wherein wireless transfer network 12 is a satellite network that operates two-way communication (Col. 3, lines 24-27).

Regarding claim 9, it is inherent for the two-way satellite communication system to have a transceiver between the satellite antenna and the communication system, wherein a transceiver is traditionally an RF or RF-digital device that receives and transmits the signal to/from the satellite. Thus, Krisbergh meets the claimed limitation "wherein the satellite network includes at least a pair of satellite transceivers and at least one satellite for transferring signals between the pair of transceivers, one and another of the pair of transceivers being operatively coupled to the at least a first communication unit and the at least a second communication unit respectively."

Regarding claim 10, Krisbergh a wide area network in Fig. 1 with elements router 40, CSU/DSU 42 connected to an ISP 60.

Regarding claim 11, Krisbergh discloses an ISP server in which a Mail server is inherently well known to be part of the ISP server (Col. 4, lines 59-65). Thus, Krisbergh meets the claimed limitation "wherein the WAN includes a Mail server."

Regarding claim 32, all limitations in claim 32 are analyzed with respect to claim 1 in combination with claim-3.

Regarding claim 33, Krisbergh further discloses wherein the at least a first communication unit (Set Top Converter 54) comprises:

Processing means 54, operatively coupled to the wireless signal transfer network 12, for sending the at least one information signal ("the command input into the Set Top Converter 54 by the inputting device 58 wherein the Set Top Converter 54 generates a display signal "text/command signal" for display on the television set 56 such as on-line Chat sessions, URL for browsing through the information source... see Fig. 6, Col. 4, lines 51-65 and then the text/command signal is transmitted by an upstream transmitter 106 on an RF-modulated upstream channel 22 ...", Col. 4, lines 48-55) and receiving the at least one return information signal (by receiving a television program along with sequential portions of the "received

information" inserted in the VBI at the terminal 54, the terminal 54 generates a television program display or extracts a "received information" from VBI, and then the Set Top Converter 54 displays the received TV programming or the received information on the television 56 respectively, see Col. 4, lines 36-65);

Input controlling means, operatively coupled to the processing means 54 and the remote data entry and control means 58, for receiving data and control information from the remote data and control means and providing the information to the processing means (Col. 4, lines 48-56); and

Display signal generating means, operatively coupled to the processing means 54, for generating the at least one display signal for display on the television set (by receiving a television program along with sequential portions of the "received information" inserted in the VBI, the Set Top Converter 54 generates a television program display, see Col. 4, lines 36-65);

In response to the at least one return information signal received by the processing means 54 and the data and control information from the remote data and control means (by receiving a television program along with sequential portions of the "received information" inserted in the VBI, the Set Top Converter 54 extracts a "received information" from VBI and displays the "received information" on the television 56, in response to the selection from the user input, see Col. 4, lines 36-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Krisbergh et al. (US 5999970) in view Lancelot et al.(US 6026086) and further in view of Gorman (US 6141356).

Regarding claim 6, Krisbergh in view of Lancelot does not disclose wherein the remote data entry and control 58 means comprise a speakerphone portion.

Gorman discloses a set of radio devices (Fig. 3, elements 54-57) comprises the wireless speakerphone (Col. 7, lines 17-23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot by including the speakerphone as a data entry device in order to provide customers with the ability to communicate with the system giving it DTMF commands, and thus making it more convenient (Col. 7, lines 13-17).

Regarding claim 7, Gorman further discloses the speakerphone portions is in RF communication with the at least a first communication unit (Col. 6, lines 64-67 where communication unit combines items 53, 62 and the STB on top TV 69 of Fig. 3, see Col. 8, lines 53-56).

3. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot et al.(US 6026086) and further in view of Arledge et al. (US 5561703).

Regarding claims 12-14, Krisbergh in view of Lancelot does not show that the functional network is a paging network that includes a paging server and a plurality of pagers.

Arledge discloses the functional network being a paging network that includes a paging server and a plurality of pagers (Abstract, lines 6-9; Fig. 1, elements 3, 13 and 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot by including the functional network being a paging network, that includes a paging server and a plurality of pagers in order to be able to deliver messages to the users on the road.

4. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot et al.(US 6026086) and further in view of Cunningham et al. (US 5991596).

Regarding claims 15-16, Krisbergh in view of Lancelot does not disclose wherein the functional network is an emergency response network including a server.

Cunningham discloses the functional network containing an emergency response network including a server 18 (Col. 4, lines 29-43; Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

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was made to modify Krisbergh in view of Lancelot by including the emergency services to the network, as taught by Cunningham, so to provide a "911" capability for interested subscribers (Col. 6, lines 38-40).

5. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot et al.(US 6026086) and further in view of Tyroler (US 6320941).

Regarding claims 17-18, Krisbergh in view of Lancelot does not disclose wherein the at least a first communication unit comprises indications means wherein the indication means is an LED.

Tyroler discloses a device comprises having LED indicator for notifying user of incoming message (Fig. 1, Col. 2, lines 60-Col. 3, lines 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot by including a LED indicator, as taught by Tyroler, so notify user of a received message (at least one return information signal has been arrived) without any prompting from the user (Col. 2, lines 5-8).

6. Claims 19-22, 26-28 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot et al.(US 6026086) and further in view of Schein et al. (US 6263501).

Regarding claims 19-20, Krisbergh in view of Lancelot does not clearly disclose at least one display signal includes data to generate at least one menu-driven window on the TV set by the first communication unit.

Schein discloses at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to E-Mail messages (Fig. 19A, element 14; Fig. 19B-C; Col. 23, lines 1-18) on the TV set by the STB unit Fig. 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot by including at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to E-Mail messages on the TV set, as taught by Schein, so to provide to user a visual interface to interact with received information (Col. 2, lines 20-25).

Regarding claim 21, Schein further discloses a STB (first communication unit) generates a message string to be included as part of the at least one information signal containing information entered by the user in the E-Mail window "Create message" (Col. 23, lines 14-18).

Regarding claim 22, Krisbergh discloses the functional network is WAN (Fig. 1, Router, CSU/DSU and ISP) wherein a Mail server is inherently well known to be part of the ISP server (Col. 4, lines 59-65) and further wherein the server (Fig. 1, element 38), coupled to the at least a second communication unit (Cable HeadEnd

Equipment 36) provides the message string (one information signal and providing data included in the information signal) to the ISP 60 (Mail Server; Col. 4, lines 48-60).

Regarding claim 26, Schein further discloses wherein the at least one menu-driven window includes displayable information relating to financial market transactions (Fig. 21C-F).

Regarding claim 27, Schein further discloses a STB (first communication unit) generates a message string to be included as part of the at least one information signal containing information entered by the user in the financial transaction windows (Fig. 21D, Col. 23, lines 58-Col. 24, lines 6).

Regarding claim 28, Krisbergh discloses the functional network is WAN (Fig. 1, Router, CSU/DSU and ISP) wherein the server (Fig. 1, HeadEnd Server 38), coupled to the at least a second communication unit (Cable HeadEnd Equipment 36) provides the message string (one information signal and providing data included in the information signal) to the WAN.

Regarding claim 34, Schein further discloses wherein the at least one display signal generated by the display signal generating means is a digital signal and wherein the at least a device unit further comprises D/A conversion means,

operatively coupled to the display signal generating means, for converting the digital display signal to analog form for display on the TV set (Col. 6, lines 29-43).

Regarding claim 35, Krisbergh discloses that the system could transmit E-Mail, Chat-room message and alike by using a keyboard (Col. 4, lines 45-56), wherein the keyboard signal supposedly is a digital signal that converts to analog signal and then it combines with the incoming signal from the HeadEnd (analog) in order to display the command and the video data on the TV set. Thus Krisbergh meets and encompasses the claimed limitation "a signal combiner, operatively coupled between the D/A conversion means and the TV set, for combining the analog display signal with at least another analog signal received from the wireless transfer network and providing the combined signals to the TV set."

7. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Schein et al. (US 6263501), and further in view of Yuen (US 5812931).

Regarding claims 23-24, Krisbergh view of Lancelot and Schein do not clearly disclose displayable information relating to paging messages wherein the message string to be included as part of the at least one information signal containing information entered by the user in the paging windows.

Yuen discloses the TV displaying and sending the paging messages (Fig.1 and 3; Abstract; Col. 1, lines 61-64). Therefore, it would have been obvious to one

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of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot and Schein by including displayable information relating to a paging message, as taught by Yuen, so to offer to user an alternative way of communication such as two-way paging system, by taking the advantage the current cable network infrastructure (Col. 3, lines 4-7).

8. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Schein et al. (US 6263501), and further in view of Yuen (US 5812931) and further in view of Arledge et al. (US 5561703).

Regarding claim 25, Krisbergh in view of Lancelot, Schein and Yuen do not clearly disclose pager server; However, Krisbergh discloses wherein the server (Fig.1, HeadEnd Server 38), coupled to the at least a second communication unit (Cable HeadEnd Equipment 36) provides the message string (one information signal and providing data included in the information signal) to the functional network (WAN or Internet) and Yuen discloses a functional network is a paging network (Fig. 3, elements 37 and 38).

Arledge Fig. 1 discloses the PBX 3 is connected to the paging server 13 (voice response unit 17 of Fig. 1, Col. 4, lines 45-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot, Schein and Yuen by having a paging server,

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as taught by Arledge, so to permit it to be customized by each user for his preferred settings (Col. 4, lines 1-30).

9. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Schein et al. (US 6263501), and further in view of Cunningham et al. (US 5991596).

Regarding claims 29 and 30, Krisbergh in view of Lancelot does not disclose the menu-driven window includes displayable information relating to emergency message and wherein the message string to be included as part of the at least one information signal containing information entered by the user in the emergency message windows;

Schein discloses the menu-driven window includes displayable information relating to receiving/sending message (Fig. 19A, element 14; Fig. 19B-C; Col. 23, lines 1-18) on the TV set by the STB unit Fig. 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot by including at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to sending/receiving (E-Mail) messages on the TV set, as taught by Schein, so to provide to user a visual interface to interact with received information (Col. 2, lines 20-25).

Krisbergh in view of Lancelot and Schein do not clearly disclose "displayable information relating to emergency message and wherein the message string to be included as part of the at least one information signal containing information entered by the user in the emergency message."

Cunningham discloses the functional network 24 containing an emergency response network for routing emergency messages to corresponding users (Col. 4, lines 29-43; Fig. 2, 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot and Schein by including the emergency services to the network, as taught by Cunningham, so to provide an add-on "911" capability for interested subscribers (Col. 6, lines 38-40).

Regarding claim 31, In combination with claims 1, 19, 29 and 30, Krisbergh discloses a server (Fig. 1, element 38), coupled to the at least a second communication unit (Cable HeadEnd 36) provides the message string (one information signal and providing data included in the information signal) to the functional network WAN.

Cunningham discloses the functional network 24 is an emergency response network 24 having an emergency response server 18 for routing emergency messages to corresponding users (Col. 4, lines 29-43; Fig. 2, 3, element 24) through Internet 17 and Broadcast Satellite Ground Terminal 19.

Therefore, it would have been obvious to replace Krisbergh's functional network WAN (Fig. 1, elements 38, 40, 42) to Cunningham's functional network 24 (emergency response network) coupled to an emergency response server 18, as taught by Cunningham, so to provide a two-way service "911" capability for interested subscribers (Col. 6, lines 38-40).

10. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Yasuki (US 6285407).

Regarding claim 36, Krisbergh discloses a wireless information signal (Wireless network; Col. 3, lines 17-27) transfer interactive television system (Col. 1, lines 60-Col. 2, lines 35) comprises:

At least a first communication unit (Fig. 1, Set Top Converter 54) operatively coupled to a television set (Fig. 1, element 56), for generating at least one information signal ("the command input into the Set Top Converter 54 by the inputting device 58 wherein the Set Top Converter 54 generates a display signal "text/command signal" for display on the television set 56 such as on-line Chat sessions, URL for browsing through the information source... see Fig. 6, Col. 4, lines 51-65 and then the text/command signal is transmitted by an upstream transmitter 106 on an RF-modulated upstream channel 22 ...", Col. 4, lines 48-55) and for generating at least one display signal for display on the television set (by receiving a television program along with sequential portions of the "received information"

inserted in the VBI at the Set Top Converter 54, the Set Top Converter 54 generates a television program display or extracts a "received information" from VBI, and then the Set Top Converter 54 displays the received TV programming or the received information on the television 56 respectively, see Col. 4, lines 36-65).

Remote keyboard device (Fig. 1, element 58), wirelessly coupled to the at least at first communication unit 54, for permitting a system user to control display of display signals on the television set 56 and enter data corresponding to the display of the display signal (Col. 4, lines 45-56 and Col. 8, lines 42-65).

Krisbergh further discloses wherein wireless transfer network 12 is a satellite network (Col. 3, lines 24-27), operatively coupled to the at least a first communication unit 54, for wirelessly transferring signals including the at least one information signal ("the command input into the terminal 54 by the inputting device 58 wherein the terminal 54 generates a display signal "text/command signal" for display on the television set 56 such as on-line Chat sessions, URL for browsing through the information source... see Fig. 6, Col. 4, lines 51-65 and then the text/command signal is transmitted by an upstream transmitter 106 on an RF-modulated upstream channel 22 ...", Col. 4, lines 48-55);

A wireless signal transfer network operatively coupled to the at least a first communication unit (terminal 54), for wirelessly transferring signals including the at least one information signal;

At least a second communication unit (Fig. 1, element 36), operatively coupled to the network 12 (Satellite network; Col. 3, lines 17-27), for receiving the at

least one information signal (Cable HeadEnd 36 receives the inputted "command" on the upstream channel of the distribution network 12; Col. 4, lines 48-60);

A server (Fig.1, element 38), operatively coupled to the at least a second communication unit (Cable HeadEnd 36), for processing the at least one information signal (a 'command') and providing data included in the information signal to a functional network 60 (the HeadEnd Server 38 receives the forwarding "command" from the Cable HeadEnd Equipment 36, then the HeadEnd Server 38 transmits a 'command' based on the forward command to the information source 60; Col. 4, lines 48-60,

Limitation "wherein the server retrieves return data from the functional network" reads on Krisbergh 's information source 60 (functional network) transmits the 'information' to the HeadEnd Server 38 (server) in which the HeadEnd Server 38 receives/retrieves/processes the 'information', see Col. 6, lines 49-53 and Col. 9, lines 8-10.

Limitation "and provides the return data to the at least a second communication unit" reads on the HeadEnd Server 38 receives/retrieves/processes the 'information' and then forwards/provides the 'information' (return data) to the VBI inserter 90 of the Cable HeadEnd Equipment 36 (a second communication unit), see Col. 6, lines 47-52; Col. 7, lines 32-35.

"The at least a second communication unit generating at least one return information signal and providing the at least one return information signal to the satellite network, the satellite network wirelessly transferring the at least one return

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information signal to the at least a first communication unit, which generates the at least one display signal for display on the TV set" further reads on the VBI inserter 90 of the Cable HeadEnd Equipment 36 (a second communication unit) generates respective downstream channel 20 (return information signal) to the network 12 (satellite network; Col. 3, lines 17-27), see Col. 7, lines 35-57 and to the terminal 54 for demodulating and displaying on the TV set, see Col. 8, lines 18-60 .

wherein the at least one information signal ("command") is independently transmitted from a TV signal (could be read on either the 'command' is from the upstream channel and is independently/separate from the downstream channel, or the Cable HeadEnd Equipment 36 (a TV signal) and the HeadEnd server 38 independently transmits the received 'command' (information signal) from the set top converter 54 to the ISP 60, see Col. 5, lines 25-Col. 6, lines 21).

Krisbergh does not disclose the at least one return information is independently transmitted from a TV signal; However, Krisbergh discloses the at least one return information is dependently transmitted from a TV signal (return data is within the VBI of the TV signal).

Lancelot, in a similar art, discloses the return data is independently transmitted from a TV signal (Fig. 2; Col. 4, lines 25-Col. 5, lines 17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh with Lancelot so to provide a unified circuit switched and packet-based communications system architecture with network interworking

functionality. Moreover, to increase the amount of data that can be transmitted downstream.

Krisbergh in view of Lancelot does not clearly disclose displaying at least one display signal superimposed on a conventional television signal. However, Krisbergh's system suggests that the process of rendering screen for display by a screen renderer or the like is well known and need not to be further described here (Col. 7, lines 18-20).

Yasuki discloses a television terminal (Fig. 1) with a mass storage device 134, a signal combiner 116 and displaying at least one display signal superimposed on a conventional television signal (Fig. 4A-C; Col. 7, lines 58-Col.8, lines 27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh's system in view of Lancelot with a signal combiner and displaying at least one display signal superimposed on a conventional television signal, as taught by Yasuki, so to provide a multi-function TV receiver which is capable of executing process related to objects which are transmitted in a accompany with TV signals and objects which are utilized in network including servers for improving utility value and achieving convenience (Col. 3, lines 15-20).

Regarding claim 37, it is inherent for the two-way satellite communication system to have a transceiver between the satellite antenna and the communication

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system, wherein a transceiver is traditionally an RF or RF-digital device that receives and transmits the signal to/from the satellite. Thus, Krisbergh meets the claimed limitation "wherein the satellite network includes at least a pair of satellite transceivers and at least one satellite for transferring signals between the pair of transceivers, one and another of the pair of transceivers being operatively coupled to the at least a first communication unit and the at least a second communication unit respectively."

Regarding claim 38, Krisbergh further discloses the network coupled to the server (HeadEnd Server 38) is a wide area network in Fig. 1 with elements router 40, CSU/DSU 42 connected to an ISP 60.

Regarding claim 39, Krisbergh further discloses wherein the WAN is the Internet (Col. 4, lines 57-65).

11. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Yasuki (US 6285407) and further in view of Arledge et al. (US 5561703).

Regarding claim 40, Krisbergh in view of Lancelot and Yasuki do not show that the functional network is a paging network that includes a paging server and a plurality of pagers.

Arledge discloses the functional network being a paging network that includes a paging server and a plurality of pagers (Abstract, lines 6-9; Fig. 1, elements 3, 13 and 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot and Yasuki by including the functional network being a paging network, that includes a paging server and a plurality of pagers, as taught by Arledge, in order to be able to deliver messages to the users on the road.

12. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Yasuki (US 6285407) and further in view of Cunningham et al. (US 5991596).

Regarding claim 41, Krisbergh in view of Lancelot and Yasuki do not disclose wherein the functional network is an emergency response network including a server.

Cunningham discloses the functional network containing an emergency response network including a server 18 (Col. 4, lines 29-43; Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot and Yasuki by including the emergency services to the network, as taught by Cunningham, so to provide a "911" capability for interested subscribers (Col. 6, lines 38-40).

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13. Claims 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Yasuki (US 6285407) and further in view of Tyroler (US 6320941).

Regarding claims 42-43, Krisbergh in view of Lancelot and Yasuki do not disclose wherein the at least a first communication unit comprises indications means wherein the indication means is an LED.

Tyroler discloses a device comprises having LED indicator for notifying user of incoming message (Fig. 1, Col. 2, lines 60-Col. 3, lines 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot and Yasuki by including a LED indicator, as taught by Tyroler, so notify user of a received message (at least one return information signal has been arrived) without any prompting from the user (Col. 2, lines 5-8).

14. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krisbergh et al. (US 5999970) in view of Lancelot (US 6026086), and further in view of Yasuki (US 6285407) and further in view of Schein et al. (US 6263501).

Regarding claim 44, Krisbergh in view of Lancelot and Yasuki do not clearly disclose at least one display signal includes data to generate at least one menu-driven window on the TV set by the first communication unit.

Schein discloses at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to E-Mail

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messages (Fig. 19A, element 14; Fig. 19B-C; Col. 23, lines 1-18) on the TV set by the STB unit Fig. 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krisbergh in view of Lancelot and Yasuki by including at least one display signal includes data to generate at least one menu-driven window includes displayable information relating to E-Mail messages on the TV set, as taught by Schein, so to provide to user a visual interface to interact with received information (Col. 2, lines 20-25).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is 703-308-7372. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher C. Grant can be reached on 703-305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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HT:ht
03/09/2005



HAI TRAN
PRIMARY EXAMINER